ABSTRACT OF THE DISCLOSURE

A self-locking reduction device used in a winch has a support to which an input shaft is rotatably mounted. The input shaft has an eccentric shaft portion. Three pins are formed at regular intervals on a circumference around the center of the eccentric shaft portion on an external gear that is mounted to the eccentric shaft portion. Three bores are formed at regular intervals on the support facing the external gear on a circumference around the center of the input shaft. The pins are engaged with the bores so that the external gear may be eccentrically moved. The number of internal teeth of the internal gear is slightly more than that of the external teeth of the external gear, thereby providing a reliable self-locking reduction device. Metal-to-metal contact between the input shaft and the wall of a surrounding bore provides a braking force for self-locking of the drive mechanism.